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Protein adsorption, biofilm, attached bacteria

biofouling

## FINAL REPORT QUESTIONNAIRE (for ONR use only)

Principal Investigato	r Name: D	awid L. Kirch	nman	
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None

List of Papers in Refereed Journals Published During Project

May 1990- June 1993.

- \*Montgomery, M.T., N.W. Welschmeyer, and D.L. Kirchman. 1990. A simple assay for chitin: Application to sediment trap samples from the Subarctic Pacific. Mar. Ecol. Prog. Ser. 64: 301-308.
- \*Nagata, T. and D.L. Kirchman. 1990. Filtration-induced release of dissolved free amino acids: application to cultures of marine protozoa. Mar. Ecol. Prog. Ser. 68: 1-5.
- \*Samuelsson, M-O. and D.L. Kirchman. 1990. Degradation of adsorbed protein by attached bacteria in relationship to surface hydrophobicity. Appl. Environ. Microbiol. 56: 3643-3648.
- \*Keil, R.G. and D.L. Kirchman. 1991. Dissolved combined amino acids in marine waters as determined by a vapor-phase hydrolysis method. Mar. Chem. 33: 243-259.
- \*Nagata, T. and D.L. Kirchman. 1991. Release of dissolved free and combined amino acids by bacteriovorous marine flagellates. Limnol. Oceanogr. 36(3): 433-443.
- \*Keil, R.G. and D.L. Kirchman. Contribution of dissolved free amino acids and ammonium to the nitrogen requirements of heterotrophic bacterioplankton. Mar. Ecol. Prog. Ser. 73: 1-10.
- Logan, B.E. and D.L. Kirchman. Increased uptake of dissolved organics by marine bacteria as a function of fluid motion. Mar. Biol. 111: 175-181.
- \*Keil, R.G. and D.L. Kirchman. 1992 Bacterial degradation of methylated protein and uniformly labelled protein. Appl. Environ. Microbiol. 58: 1374-1375.
- \*Montgomery, M.T. and D.L. Kirchman. 1993. Role of chitin-binding proteins in the specific attachment of the marine bacterium <u>Vibrio harveyi</u> to chitin. Appl. Environ. Microbiol. 59: 373-379.
- \*Keil, R.G. and D.L. Kirchman. 1993. Dissolved combined amino acids: chemical form and utilization by marine bacteria. Linnol. Oceanogr. In press.
- \*Keil, R.G. and D.L. Kirchman. Abiotic transformation of labile protein to refractory protein in seawater. Mar. Chem. In press.
- \*Students or postdoc's in P.I.'s lab (D.L. Kirchman)

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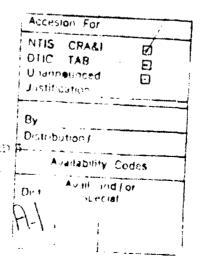
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